

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

South Texas Electric Cooperative, Inc.

AUTHORIZING THE OPERATION OF

Pearsall Power Plant
Electric Services

LOCATED AT

Frio County, Texas

Latitude 28° 55' 40" Longitude 99° 5' 28"

Regulated Entity Number: RN100217488

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O867 Issuance Date:

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
 - E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions

outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader
- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

- E. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
 - (iv) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)

- D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
 - H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)
6. For the National Emissions Standards for Asbestos specified in 40 CFR Part 61, Subpart M, the permit holder shall comply with the following requirements:
- A. For insulating materials other than spray-applied: Title 40 CFR § 61.148 (relating to Standards for Insulating Materials), for installation and reinstallation of asbestos-containing insulation).
7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction

Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.
- A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.
 - B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
12. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
- A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Requirements of the Electric Generating Unit Standard Permit for facilities located in the West Texas region based on the information contained in the registration application.

Compliance Requirements

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
14. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Permit Location

15. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

16. A permit shield is granted for the emission units, groups, or processes specified in the attached “Permit Shield.” Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment “Permit Shield.” Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-EU	Boilers/Steam Generators/Steam Generating Units	B1, B2, B3	TX-112-1	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
B1	Emission Points/Stationary Vents/Process Vents	N/A	TX-112-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
B2	Emission Points/Stationary Vents/Process Vents	N/A	TX-112-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
B3	Emission Points/Stationary Vents/Process Vents	N/A	TX-112-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EPN26	SRIC Engines	N/A	60IIII	40 CFR Part 60, Subpart IIII	No changing attributes.
EPN26	SRIC Engines	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
EPN27	SRIC Engines	N/A	60IIII	40 CFR Part 60, Subpart IIII	No changing attributes.
EPN27	SRIC Engines	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPENG	SRIC Engines	ENG01, ENG02, ENG03, ENG04, ENG05, ENG06, ENG07, ENG08, ENG09, ENG10, ENG11, ENG12, ENG13, ENG14, ENG15, ENG16, ENG17, ENG18, ENG19, ENG20, ENG21, ENG22, ENG23, ENG24	60JJJJ	40 CFR Part 60, Subpart JJJJ	No changing attributes.
GRPENG	SRIC Engines	ENG01, ENG02, ENG03, ENG04, ENG05, ENG06, ENG07, ENG08, ENG09, ENG10, ENG11, ENG12, ENG13, ENG14, ENG15, ENG16, ENG17, ENG18, ENG19, ENG20, ENG21, ENG22, ENG23, ENG24	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-EU	EU	TX-112-1	SO ₂	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(a)	No person may cause, suffer, allow, or permit emissions of SO ₂ from any liquid fuel-fired steam generator, furnace, or heater to exceed 440 ppmv at actual stack conditions and averaged over 3-hours.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
B1	EP	TX-112-1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
B2	EP	TX-112-1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
B3	EP	TX-112-1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EPN26	EU	60III	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
EPN26	EU	60III	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EPN26	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
EPN27	EU	60IIII	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EPN27	EU	60III	NMHC and NO _x	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
EPN27	EU	60III	PM (OPACITY)	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3) and §1039.105(b)(1)-(3).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EPN27	EU	60III	PM	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
EPN27	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart III, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPENG	EU	60JJJJ	CO	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4243(g) § 60.4246	Owners and operators of stationary non-emergency natural gas engines with a maximum engine power greater than or equal to 500 HP and were manufactured on or after 07/01/2007 and before 07/01/2010 must comply with a CO emission limit of 4.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4244(a) § 60.4244(b) § 60.4244(c) § 60.4244(e)	§ 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(4)	[G]§ 60.4245(c) § 60.4245(d)
GRPENG	EU	60JJJJ	NO _x	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4243(g) § 60.4246	Owners and operators of stationary non-emergency natural gas engines with a maximum engine power greater than or equal to 500 HP and were manufactured on or after 07/01/2007 and before 07/01/2010 must comply with a NO _x emission limit of 2.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4244(a) § 60.4244(b) § 60.4244(c) § 60.4244(d)	§ 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(4)	[G]§ 60.4245(c) § 60.4245(d)
GRPENG	EU	60JJJJ	VOC	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4243(g) § 60.4246	Owners and operators of stationary non-emergency natural gas engines with a maximum engine power greater than or equal to 500 HP and were manufactured on or after 07/01/2007 and before 07/01/2010 must comply with a VOC emission limit of 1.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4244(a) § 60.4244(b) § 60.4244(c) § 60.4244(f) § 60.4244(g)	§ 60.4243(b)(2) § 60.4243(b)(2)(ii) § 60.4243(e) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(4)	[G]§ 60.4245(c) § 60.4245(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPENG	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6600 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart ZZZZ

Additional Monitoring Requirements

Periodic Monitoring Summary..... 24

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: TX-112-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: TX-112-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: TX-112-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-EU	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: TX-112-1
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Sulfur Content of Fuel	
Minimum Frequency: Quarterly and within 24 hours of any fuel change	
Averaging Period: n/a*	
Deviation Limit: Any monitoring data above 0.79% sulfur concentration in the fuel oil shall be considered and reported as a deviation.	
Periodic Monitoring Text: Measure and record the sulfur content of the fuel. Any monitoring data above the deviation limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-EU	B1, B2, B3	40 CFR Part 60, Subpart D	B1, B2, and B3 began operation in 1961 and have not been modified since August 17, 1971.
GRP-EU	B1, B2, B3	40 CFR Part 60, Subpart Da	B1, B2, and B3 began operation in 1961 and have not been modified since September 18, 1978.
GRP-EU	B1, B2, B3	40 CFR Part 60, Subpart Db	B1, B2, and B3 began operation in 1961 and have not been modified since June 19, 1984.
GRP-EU	B1, B2, B3	40 CFR Part 60, Subpart Dc	B1, B2, and B3 began operation in 1961 and have not been modified since June 19, 1989.
COT1	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not been operated with chromium-based water treatment chemicals on or since September 8, 1994.
EPN25	N/A	30 TAC Chapter 112, Sulfur Compounds	Heater does not burn liquid fuel.
EPN26	N/A	40 CFR Part 64, Compliance Assurance Monitoring	Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRPENG	ENG01, ENG02, ENG03, ENG04, ENG05, ENG06, ENG07, ENG08, ENG09, ENG10, ENG11, ENG12, ENG13, ENG14, ENG15, ENG16, ENG17, ENG18, ENG19, ENG20, ENG21, ENG22, ENG23, ENG24	40 CFR Part 72	New unit with a total nameplate capacity of 25 MWe or less.
FOT1	N/A	40 CFR Part 60, Subpart K	FOT1 began operation in 1961 and has not been modified since June 11, 1973.

New Source Review Authorization References

New Source Review Authorization References 32

New Source Review Authorization References by Emission Unit..... 33

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX1133	Issuance Date: 01/23/2009
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 382.05185(A)	Issuance Date: 09/01/2001
Authorization No.: 73316	Issuance Date: 01/19/2006
Authorization No.: 84824	Issuance Date: 01/23/2009

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B1	BOILER UNIT 1	382.05185(A)
B2	BOILER UNIT 2	382.05185(A)
B3	BOILER UNIT 3	382.05185(A)
COT1	COOLING TOWER	73316
ENG01	IC ENGINE	84824, PSDTX1133
ENG02	IC ENGINE	84824, PSDTX1133
ENG03	IC ENGINE	84824, PSDTX1133
ENG04	IC ENGINE	84824, PSDTX1133
ENG05	IC ENGINE	84824, PSDTX1133
ENG06	IC ENGINE	84824, PSDTX1133
ENG07	IC ENGINE	84824, PSDTX1133
ENG08	IC ENGINE	84824, PSDTX1133
ENG09	IC ENGINE	84824, PSDTX1133
ENG10	IC ENGINE	84824, PSDTX1133
ENG11	IC ENGINE	84824, PSDTX1133
ENG12	IC ENGINE	84824, PSDTX1133
ENG13	IC ENGINE	84824, PSDTX1133
ENG14	IC ENGINE	84824, PSDTX1133

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
ENG15	IC ENGINE	84824, PSDTX1133
ENG16	IC ENGINE	84824, PSDTX1133
ENG17	IC ENGINE	84824, PSDTX1133
ENG18	IC ENGINE	84824, PSDTX1133
ENG19	IC ENGINE	84824, PSDTX1133
ENG20	IC ENGINE	84824, PSDTX1133
ENG21	IC ENGINE	84824, PSDTX1133
ENG22	IC ENGINE	84824, PSDTX1133
ENG23	IC ENGINE	84824, PSDTX1133
ENG24	IC ENGINE	84824, PSDTX1133
EPN25	GAS HEATER	84824, PSDTX1133
EPN26	EMERGENCY FIRE PUMP	84824, PSDTX1133
EPN27	EMERGENCY DIESEL GENERATOR	84824, PSDTX1133
FOT1	FUEL OIL STORAGE TANK	382.05185(A)

Appendix A

Acronym List 36

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	.....	actual cubic feet per minute
AMOC	.....	alternate means of control
ARP	.....	Acid Rain Program
ASTM	.....	American Society of Testing and Materials
B/PA	.....	Beaumont/Port Arthur (nonattainment area)
CAM	.....	Compliance Assurance Monitoring
CD	.....	control device
COMS	.....	continuous opacity monitoring system
CVS	.....	closed-vent system
D/FW	.....	Dallas/Fort Worth (nonattainment area)
DR	.....	Designated Representative
ELP	.....	El Paso (nonattainment area)
EP	.....	emission point
EPA	.....	U.S. Environmental Protection Agency
EU	.....	emission unit
FCAA Amendments	.....	Federal Clean Air Act Amendments
FOP	.....	federal operating permit
GF	.....	grandfathered
gr/100 scf	.....	grains per 100 standard cubic feet
HAP	.....	hazardous air pollutant
H/G/B	.....	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	.....	hydrogen sulfide
ID No.	.....	identification number
lb/hr	.....	pound(s) per hour
MMBtu/hr	.....	Million British thermal units per hour
MRRT	.....	monitoring, recordkeeping, reporting, and testing
NA	.....	nonattainment
N/A	.....	not applicable
NADB	.....	National Allowance Data Base
NO _x	.....	nitrogen oxides
NSPS	.....	New Source Performance Standard (40 CFR Part 60)
NSR	.....	New Source Review
ORIS	.....	Office of Regulatory Information Systems
Pb	.....	lead
PBR	.....	Permit By Rule
PM	.....	particulate matter
ppmv	.....	parts per million by volume
PSD	.....	prevention of significant deterioration
RO	.....	Responsible Official
SO ₂	.....	sulfur dioxide
TCEQ	.....	Texas Commission on Environmental Quality
TSP	.....	total suspended particulate
TVP	.....	true vapor pressure
U.S.C.	.....	United States Code
VOC	.....	volatile organic compound

Appendix B

Major NSR Summary Table.....38

Major NSR Summary Table

Permit Number: 84824 and PSDTX1133				Issuance Date: 01/23/2009			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements Spec. Cond.	Recordkeeping Requirements Spec. Cond.	Reporting Requirements Spec. Cond.
			lb/hr	TPY**			
ENG01 through ENG24	Engine 1 through Engine 24 (each engine)	NO _x (4)	2.16	--	4, 6, 9	4, 6, 9, 10, 11	4, 6,12
		CO (4)	7.69	--	4, 6, 9	4, 6, 9, 10, 11	4, 6,12
		VOC (4)	7.69	--	4, 6	4, 6, 10	4, 6
		PM ₁₀ (4)	4.50	--	4	4	4
		SO ₂	0.21	--	4, 2	4, 11	4
		H ₂ CO	0.21	--	4	4	4
		HAP	0.67	--	4	4	4
		NH ₃	0.97	--	4, 8	4, 6, 8, 11	4
		H ₂ SO ₄	3.24E-02	--	4	4	4
ENG01 through ENG24 Start-up	Engine 1 through Engine 24 Start-up (each engine) (250 hours)	NO _x (4)	23.52	--			
		CO (4)	26.46	--			
		VOC (4)	13.23	--			
		PM ₁₀ (4)	4.85	--			
		SO ₂	0.21	--	2		
		H ₂ CO	0.21	--			
		HAP	0.67	--			
		NH ₃	0.97	--			
		H ₂ SO ₄	0.03	--			

Footnotes: (see below)

Major NSR Summary Table

Permit Number: 84824 and PSDTX1133				Issuance Date: 01/23/2009			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements Spec. Cond.	Recordkeeping Requirements Spec. Cond.	Reporting Requirements Spec. Cond.
			lb/hr	TPY**			
ENG01 through ENG24 Annual	Engine 1 through Engine 24 Annual (each engine)	NO _x (4)	--	12.10	4, 6, 9	4, 6, 9, 10, 11	4, 6,12
		CO (4)	--	36.04	4, 6, 9	4, 6, 9, 10, 11	4, 6,12
		VOC (4)	--	34.385	4, 6	4, 6, 10	4, 6
		PM ₁₀ (4)	--	19.75	4	4	4
		SO ₂	--	0.93	4, 2	4, 11	4
		H ₂ CO	--	0.90	4	4	4
		HAP	--	2.92	4	4	4
		NH ₃	--	4.27	4, 8	4, 8, 11	4
		H ₂ SO ₄	--	0.14	4	4	4
HTR25	Natural Gas Line Heater	NO _x (4)	0.69	3.01			
		CO (4)	0.42	1.83			
		VOC (4)	0.02	0.07			
		PM ₁₀ (4)	0.02	0.09			
		SO ₂	8.5E-03	0.037			
FP26_S	Diesel Fire Pump	NO _x (4)	4.65	0.23	4	4	4
		CO (4)	1.00	0.05	4	4	4
		VOC (4)	0.38	0.02	4	4	4
		PM ₁₀ (4)	0.33	0.02	4	4	4
		SO ₂	0.31	0.02	4	4	4

Footnotes: (see below)

Major NSR Summary Table

Permit Number: 84824 and PSDTX1133				Issuance Date: 01/23/2009			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
Gen27_S	Diesel Generator	NO _x (4)	8.31	0.42	4	4	4
		CO (4)	1.79	0.09	4	4	4
		VOC (4)	0.67	0.03	4	4	4
		PM ₁₀ (4)	0.59	0.03	4	4	4
		SO ₂	0.55	0.03	4	4	4

Footnotes:

- (1) Emission point identification – either specific equipment designation or emission point number from a plot plan.
 - (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
 - (3)
 - NO_x - total oxides of nitrogen
 - CO - carbon monoxide
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - PM₁₀ - particulate material equal to or less than 10 microns in diameter
 - SO₂ - sulfur dioxide
 - H₂CO - formaldehyde
 - HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
 - NH₃ - ammonia
 - H₂SO₄ - sulfuric acid
 - (4) Pollutants subject PSD review.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year
- ** Compliance with annual emission limits is based on a rolling 12-month period



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO
South Texas Electric Cooperative, Inc.
AUTHORIZING THE CONSTRUCTION AND OPERATION OF
Pearsall Power Plant
LOCATED AT Pearsall, Frio County, Texas
LATITUDE 28° 55' 40" LONGITUDE 099° 05' 30"

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMIT 84824 and PSD-TX-1133

Date: January 23, 2009

For the Commission

SPECIAL CONDITIONS

Permit Numbers 84824 and PSD-TX-1133

FUEL SPECIFICATIONS AND WORK PRACTICES

1. This permit covers the installation and operation of 24 Wärtsilä, Model 20v34SG, 11,631 brake-horsepower (bhp) (nominal) natural gas-fired engines for the generation of up to a total of 203 megawatts (nominal rating) of electricity. This permit also covers the installation of support equipment including a diesel fire pump, a diesel generator and a natural gas-fired heater. **(PSD)**
2. Fuel fired in the engines is limited to pipeline quality natural gas containing no more than 1.0 gr/100 scf total sulfur. The use of any other fuel will require an amendment to this permit. **(PSD)**
3. Emissions of NO_x, CO, and VOC shall comply with the following limits: **(PSD)**

<u>Emission Unit</u>	<u>Air Contaminant</u>	<u>Emission Rate Limit</u>
Wärtsilä	NO _x	0.084 g/bhp-hr
20v34SG	CO	0.3 g/bhp-hr
11,630.9 bhp	VOC	0.3 g/bhp-hr

The emission rates shall be reported in brake specific units of gram per horsepower-hour (g/hp-hr) and in units of pounds per hour. The g/hp-hr limits for NO_x, CO, and VOC listed above, along with the hourly and annual emission rate limits referenced in the attached maximum allowable emission rates table (MAERT), represent the best available control technology and are applicable under all engine load conditions.

FEDERAL APPLICABILITY

4. The engines shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated for Stationary Spark Ignition Internal Combustion Engines in Title 40 Code of Federal Regulation Part 60, Subpart JJJJ (40 CFR Part 60, Subpart JJJJ) and of the National Emission Standard for Hazardous Air Pollutants as regulated by Title 40 Code of Federal Regulation Part 63, Subpart ZZZZ (40 CFR Part 63, Subpart ZZZZ. The diesel fire pump and diesel generator shall comply with all applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources promulgated for Stationary Compression Ignition Internal Combustion Engines in Title 40 Code of Federal Regulation Part 60, Subpart IIII (40 CFR Part 60, Subparts IIII). **(PSD)**

SPECIAL CONDITIONS

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Permit Numbers 84824 and PSD-TX-1133

5. If any state or federal rule or regulation is more stringent than this permit, then the more stringent condition or limitation shall govern and be the standard by which compliance will be demonstrated.

INITIAL DETERMINATION OF COMPLIANCE

6. The holder of this permit shall perform stack testing to establish the actual pattern and quantities of air contaminants being emitted from one of the engines. The holder of this permit shall provide test facilities and conduct test operations at his expense.

Gaseous sampling ports and sampling platforms shall be incorporated into the design of the engine stack per specifications in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director. **(PSD)**

- A. The TCEQ San Antonio Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Method or procedure used to determine engine load.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ San Antonio Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in Section B of this condition shall be submitted to the TCEQ Air Permits Division in Austin.

SPECIAL CONDITIONS

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Permit Numbers 84824 and PSD-TX-1133

- B. Air contaminants emitted from the engine to be tested for include (but are not limited to) nitrogen oxides (NO_x), carbon monoxide (CO), oxygen (O₂), and volatile organic compounds (VOC). Emissions shall be determined by appropriate EPA methods or other methods approved by the TCEQ San Antonio Regional Director or the TCEQ Field Operations Support Division prior to sampling.
- C. Emissions of NO_x and CO shall be sampled at three points in the normal operating range including the upper and lower ends of full engine load range. For each test, the following engine operating parameters shall be clearly described in the sampling report: air-fuel ratio, engine speed, and horsepower.
- D. During testing, emissions of NO_x, CO, and VOC shall demonstrate compliance with the limits set in Special Condition No. 3.
- E. For test purposes only, the holder of this permit may operate the engine outside its proposed operating range during the initial performance test solely for the purpose of determining the compliance operating range of the engine. Exceedance of emission limits during initial performance testing will not be considered a violation of the permit.
- F. Sampling shall be performed within 180 days after initial start-up of the engine and at such other times as required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ San Antonio Regional Office.
- G. Two copies of the final sampling report shall be forwarded to the TCEQ within 45 days after sampling is completed. The reports shall be distributed as follows:

One copy to the TCEQ San Antonio Regional Office

One copy to EPA Region 6

CHEMICAL STORAGE

- 7. This permit allows for the construction of two 30,000-gallon urea storage tanks. Storage of urea on-site is limited to these two tanks only unless authorization is obtained for more tanks. Tanks will be atmospheric for a 19-40 percent urea solution.

SPECIAL CONDITIONS

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Permit Numbers 84824 and PSD-TX-1133

CONTINUOUS DETERMINATION OF COMPLIANCE

8. The NH_3 concentration in each Exhaust Stack (EPNs ENG01 through ENG24) shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for NH_3 slip is only required on days when the SCR unit is in operation.

- A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NH_3 .
- B. As an approved alternative, the NH_3 slip may be measured using a sorbent or stain tube device specific for NH_3 measurement. The frequency of sorbent/stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of urea from being introduced in the Selective Catalytic Reduction (SCR) unit and when operation of the SCR unit have been proven successful with regard to controlling NH_3 slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy.

If the measured ammonia slip concentration exceeds 5 ppm for a consecutive one-hour period or the average of one or more sorbent or stain tube tests in an hour, the permit holder shall begin NH_3 testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or the EPA Conditional Test Method (CTM) 27 on a quarterly basis, in addition to the weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates NH_3 slip is 3 ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent/stain tube testing again indicate 5 ppm NH_3 slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 3.

- C. As an approved alternative to sorbent or stain tube testing or an NH_3 CEMS, the permit holder may install and operate a second NO_x CEMS probe located between the duct burners and the SCR, upstream of the stack NO_x CEMS, which may be used in association with the SCR efficiency and NH_3 injection rate to estimate NH_3 slip. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR unit.
- D. As an approved alternative to sorbent or stain tube testing, NH_3 CEMS, or a second NO_x CEMS, the permit holder may install and operate a dual stream system of NO_x CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one NO_x CEMS and the other exhaust stream would be routed through a NH_3 converter to convert NH_3 to NO_x and then to a second NO_x CEMS.

SPECIAL CONDITIONS

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The NH₃ slip concentration shall be calculated from the delta between the two NO_x CEMS readings (converted and unconverted).

- E. Any other method used for measuring NH₃ slip shall require prior approval from the TCEQ San Antonio Regional Office.
9. In order to demonstrate that emission limits specified in the MAERT are continuously met, the holder of this permit shall perform the following: **(PSD)**
- A. Conduct evaluations of engine performance every calendar quarter with more than two months between tests by measuring the NO_x, CO, and O₂ content of the exhaust. Individual engines shall be subject to quarterly performance evaluation if they were in operation for 500 hours or more during the subject three month (quarterly) period. Engines in operation less than 500 hours during the subject three month (quarterly) period must be tested if operating when the testing of another engine occurs. The performance of each engine shall be evaluated at a minimum once per year regardless of hours of operation.
 - B. The use of portable analyzers specifically designed for measuring the concentration of each contaminant in parts per million by volume is acceptable for these evaluations. A hot air probe or equivalent shall be used with portable analyzers to prevent error in results due to high exhaust gas temperatures. Three sets of measurements shall be averaged to determine the concentrations. Prior to and following the measurements, the portable analyzer shall be checked for accuracy using an audit gas that conforms to the specifications in 40 CFR Part 60, Appendix F, 5.1.2(3). Any other method approved by the TCEQ San Antonio Regional Office is also acceptable.
 - C. Emissions shall be measured and recorded in the as-found operating condition, except no compliance determination shall be established during start-up, shutdown, or under breakdown conditions.
 - D. The permit holder shall monitor fuel consumption and use a portable analyzer to monitor nitrogen oxides and oxygen concentration in the exhaust stream of the control device. The portable analyzer shall be operated in accordance with the EPA's, Office of Air Quality Planning and Standards, Emission Measurement Center Conditional Test Method - Determination of Oxygen, Carbon Monoxide, and Oxides of Nitrogen from Stationary Sources for Periodic Monitoring (Portable Electrochemical Analyzer Procedure) [CTM-034] (September 8, 1999). NO_x Emissions shall be corrected and calculated in units of the underlying applicable emission limitation (grams per horsepower-hour, pounds per MMBtu, pounds per hour).

SPECIAL CONDITIONS

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RECORDKEEPING

10. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made immediately available upon request to designated representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction **(PSD)**.
 - A. A copy of this permit.
 - B. Permit application submitted April 2008, and subsequent representations submitted to the TCEQ.
 - C. The results of the initial stack test required in Special Condition No. 6.
11. The following information shall be maintained at the plant by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction. **(PSD)**
 - A. Date and description of any engine maintenance and any support equipment maintenance.
 - B. Quarterly records of fuel usage and total sulfur content.
 - C. The results of the quarterly evaluations required in Special Condition No. 9.
 - D. Stack sampling results or other air emissions testing that may be conducted on units authorized under this permit after the date of issuance of this permit.
 - E. A copy of all reports required by Special Condition No. 12.
 - F. Monthly records of total power station electrical production.
 - G. Quarterly records of the quantity of natural gas routed to the engines including date and duration of time to each engine.

REPORTING

12. The holder of this permit shall submit to the TCEQ San Antonio Regional Office, quarterly reports, no later than 45 days after the end of the quarter, containing the following: **(PSD)**

SPECIAL CONDITIONS

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Permit Numbers 84824 and PSD-TX-1133

- A. Results of the quarterly evaluations required in Special Condition No. 9.
- C. In addition to requirements under Title 30 Texas Administrative Code §§ 101.201 and 101.211 a summary of the periods of emission limit exceedance.
- D. When no excess emissions or air pollution control equipment failures or adjustments have occurred, such information shall be stated in the report.

Dated January 23, 2009

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 84824 and PSD-TX-1133

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
ENG01 through ENG24	Engine 1 through Engine 24 (Each engine)	NO _x (4)	2.16	---
		CO (4)	7.69	---
		VOC (4)	7.69	---
		PM ₁₀ (4)	4.50	---
		SO ₂	0.21	---
		H ₂ CO	0.21	---
		HAP	0.67	---
		NH ₃	0.97	---
		H ₂ SO ₄	3.24E-02	---
ENG01 through ENG24 Start-Up	Engine 1 through Engine 24 Start-Up (Each engine) (250 hours)	NO _x (4)	23.52	---
		CO (4)	26.46	---
		VOC (4)	13.23	---
		PM ₁₀ (4)	4.85	---
		SO ₂	0.21	---
		H ₂ CO	0.21	---
		HAP	0.67	---
		NH ₃	0.97	---
		H ₂ SO ₄	0.03	---
ENG01 through ENG24 Annual	Engine 1 through Engine 24 Annual (Each Engine)	NO _x (4)	---	12.10
		CO (4)	---	36.04
		VOC (4)	---	34.385
		PM ₁₀ (4)	---	19.75
		SO ₂	---	0.93
		H ₂ CO	---	0.90
		HAP	---	2.92
		NH ₃	---	4.27
		H ₂ SO ₄	---	0.14
HTR25	Natural Gas Line Heater	NO _x (4)	0.69	3.01
		CO (4)	0.42	1.83
		VOC (4)	0.02	0.07
		PM ₁₀ (4)	0.02	0.09

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		SO ₂	8.5E-03	0.037
FP26_S	Diesel Fire Pump	NO _x (4)	4.65	0.23
		CO (4)	1.00	0.05
		VOC (4)	0.38	0.02
		PM ₁₀ (4)	0.33	0.02
		SO ₂	0.31	0.02
Gen27_S	Diesel Generator	NO _x (4)	8.31	0.42
		CO (4)	1.79	0.09
		VOC (4)	0.67	0.03
		PM ₁₀ (4)	0.59	0.03
		SO ₂	0.55	0.03

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM₁₀ - particulate matter equal to or less than 10 microns in diameter
SO₂ - sulfur dioxide
H₂CO - formaldehyde
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
NH₃ - ammonia
H₂SO₄ - sulfuric acid
- (4) Pollutants subject to PSD review.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated January 23, 2009